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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,820	04/06/2001	Kiichirou Wakamatsu	12894/004001/56059-US	6362

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EXAMINER

DEAN, RAYMOND S

ART UNIT PAPER NUMBER

2684

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/827,820

Applicant(s)

WAKAMATSU, KIICHIROU

Examiner

Raymond S Dean

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 4 and 6 - 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 4 and 6 - 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 2, 4, 8 – 11, and 14 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichimura (US 6,501,968) in view of Reichelt (US 6,427,072).

Regarding Claim 1, Ichimura teaches a mobile phone powered by a battery having a communication function and an additional function (Column 2 lines 50 – 54, Column 2 lines 64 – 67, Column 3 lines 1 – 8) the mobile phone comprising: means for determining whether a level of a battery capacity is lower than a threshold level for permitting operation of the additional function (Column 4 lines 46 – 50); and means for informing a user of restriction of the additional function when the battery capacity is lower than the threshold level (Column 5 lines 24 – 46, Column 5 lines 55 – 62).

Ichimura does not teach a means for detecting a signal for initializing operation of the additional function; and means for informing a user of restriction of the additional function when the signal for initializing operation of the additional function is detected.

Reichelt teaches a means for detecting a signal for initializing operation of the additional function (Column 7 lines 49 – 62, the additional function is the non-

emergency call capability, in order for the warning and explanation alert to be activated there must be an inherent detection of a initialization of the non-emergency call function); and means for informing a user of restriction of the additional function when the signal for initializing operation of the additional function is detected (Column 7 lines 49 – 62).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the means for detecting an initialization signal and means for informing a user of restriction when said initialization signal is detected as taught above in Reichelt in the portable terminal of Ichimura for the purpose of alerting the user of the potential problem associated with the continuation of the additional function as taught by Reichelt.

Regarding Claim 2, Ichimura in view of Reichelt teaches all of the claimed limitations recited in Claim 1. Reichelt further teaches wherein the informing means includes means for inquiring user's intention whether to operate the additional function when the battery capacity is lower than the threshold level (Column 5 lines 24 – 34, Column 7 lines 65 – 67, Column 8 lines 1 – 3, the user has the option to invoke/not invoke an override function in order to make a non-emergency call).

Regarding Claim 4, Ichimura teaches a mobile phone powered by a battery having a communication function and an additional function (Column 2 lines 50 – 54, Column 2 lines 64 – 67, Column 3 lines 1 – 8), the mobile phone comprising: first means for determining whether a battery capacity is lower than a first level (Column 4 lines 46 – 50); means for informing a user that the battery capacity is lower than the first

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level (Column 4 lines 46 – 50); first means for restricting operation of the additional function when the user so requests (Column 5 lines 24 – 46, Column 5 lines 55 – 62); second means for determining whether the battery capacity is lower than a second level which is lower than the first level (Column 4 lines 27 – 50, Column 4 lines 61 – 67, Column 5 lines 1 – 4, when the residual battery capacity is larger there will be a threshold level, which is the larger threshold level, below which the additional function will not operate, when the residual battery capacity is smaller there will be a threshold level, which is the smaller than said larger threshold level, below which the communication function will not operate); and second means for restricting operation of the communication function when the battery capacity is lower than the second level (Column 4 lines 61 – 67, Column 5 lines 1 – 4).

Ichimura does not teach the inputting of a signal for initializing the operation of the additional function.

Reichelt teaches the inputting of a signal for initializing the operation of the additional function (Column 7 lines 49 – 62).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the inputting method taught above in Reichelt in the portable terminal of Ichimura for the purpose of alerting the user of the potential problem associated with the continuation of the additional function as taught by Reichelt.

Regarding Claim 8, Ichimura in view of Reichelt teaches all of the claimed limitations recited in Claim 4. Reichelt further teaches a means for detecting whether the additional function is being operated wherein the first restricting means terminates

the operation of the additional function when the additional function is being operated (Column 7 lines 49 – 52, in order for the warning alert and/or disablement to be activated there must be an inherent detection of a initialization of the non-emergency call function).

Regarding Claim 9, Ichimura in view of Reichelt teaches all of the claimed limitations recited in Claim 4. Ichimura further teaches a means for detecting whether the additional function is being operated wherein: the informing means includes a visual display panel for displaying the restriction of the additional function thereon (Column 4 lines 39 – 42, Column 5 lines 55 – 62); and the restriction is displayed on the display panel as a sign to prohibit the operation of the additional function when the additional function is not being operated (Column 5 lines 55 – 62).

Regarding Claim 10, Ichimura in view of Reichelt teaches all of the claimed limitations recited in Claim 9. Reichelt further teaches means for selecting either to follow or not to follow the prohibiting sign displayed (Column 7 lines 65 – 67, Column 8 lines 1 – 3, the user has the option to invoke/ not invoke an override function in order to make a non-emergency call).

Regarding Claim 11, Ichimura in view of Reichelt teaches all of the claimed limitations recited in Claim 4. Ichimura further teaches a third means for determining after the first restricting means restricts the additional function, whether the battery capacity is higher than a third level which is higher than the first level (Column 4 lines 27 – 46, the level at which there is enough residual battery power to operate the additional function is the third level); and means for canceling the restriction of the additional

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function when the battery capacity is higher than the third level (Column 5 lines 55 – 67, when the residual battery capacity is adequate for operation of the additional function said additional function will not be restricted).

Regarding Claim 14, Ichimura teaches a mobile phone powered by a battery having a communication function and at least one additional function (Column 2 lines 50 – 54, Column 2 lines 64 – 67, Column 3 lines 1 – 8), the mobile phone comprising: first means for determining whether a battery capacity is lower than a first level (Column 4 lines 46 – 50); means for informing a user that the battery capacity is lower than the first level when such is determined by the first determining means (Column 4 lines 46 – 50); second means for determining whether the battery capacity is lower than a second level which is lower than the first level (Column 4 lines 27 – 50, Column 4 lines 61 – 67, Column 5 lines 1 – 4, when the residual battery capacity is larger there will be a threshold level , which is the larger threshold level, below which the additional function will not operate, when the residual battery capacity is smaller there will be a threshold level, which is the smaller than said larger threshold level, below which the communication function will not operate); and means for restricting operation of the communication function when the battery capacity is determined to be lower than the second level by the second determining means (Column 4 lines 61 – 67, Column 5 lines 1 – 4).

Ichimura does not teach the inputting of a signal for initializing the operation of the additional function.

Reichelt teaches the inputting of a signal for initializing the operation of the additional function (Column 7 lines 49 – 62).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the inputting method taught above in Reichelt in the portable terminal of Ichimura for the purpose of alerting the user of the potential problem associated with the continuation of the additional function as taught by Reichelt.

Regarding Claim 15, Ichimura in view of Reichelt teaches all of the claimed limitations recited in Claim 14. Ichimura further teaches a means for restricting operation of only the additional function when the battery capacity is determined to be lower than the first level by the first determining means (Column 5 lines 55 – 67).

Regarding Claim 16, Ichimura in view of Reichelt teaches all of the claimed limitations recited in Claim 14. Ichimura further teaches an informing means that informs to the user that operation of only the additional function is restricted when the battery capacity is determined to be lower than the first level by the first determining means (Column 5 lines 55 – 67).

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ichimura (US 6,501,968) in view of Nonogaki (US 6,625,478 B1).

Regarding Claim 3, Ichimura teaches a mobile phone powered by a battery having a communication function and an additional function (Column 2 lines 50 – 54, Column 2 lines 64 – 67, Column 3 lines 1 – 8), the mobile phone comprising: means for determining whether a level of a battery capacity is lower than a threshold level for

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permitting operation of additional function (Column 4 lines 46 – 50); and means for terminating operation of the additional function and for informing a user of that effect through an earphone when the battery capacity becomes lower than the threshold level during a period in which the additional function is being operated (Column 4 lines 39 – 42, Column 5 lines 55 – 67, a typical speaker in a portable information terminal such as a cellular phone is an earphone).

Ichimura does not teach an additional function that is a music sounds producing function.

Nonogaki teaches a music sounds producing function (Column 4 lines 7 – 15).

Ichimura and Nonogaki both teach a mobile terminal with multiple functions thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the music producing function taught in Nonogaki in the mobile terminal of Naito for the purpose of creating a mobile terminal with multimedia capability as taught by Nonogaki.

4. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichimura (US 6,501,968) in view of Reichelt (6,427,072) as applied to claim 4 above, and further in view of Nonogaki (US 6,625,478 B1).

Regarding Claim 6, Ichimura in view of Reichelt teaches all of the claimed limitations recited in Claim 4. Ichimura in view of Reichelt does not teach the additional function is a function for producing music sounds.

Nonogaki teaches an additional function that is a function for producing music sounds (Column 4 lines 7 – 15).

Ichimura in view of Reichelt and Nonogaki teach a mobile terminal with multiple functions thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the music producing function taught in Nonogaki in the mobile terminal in Ichimura in view of Reichelt for the purpose of creating a mobile terminal with multimedia capability as taught by Nonogaki.

Regarding Claim 7, Ichimura in view of Reichelt and in further view of Nonogaki teaches all of the claimed limitations recited in Claim 6. Ichimura further teaches an informing means that informs the user of the restriction of an additional function as warning sounds superimposed (Column 4 lines 39 – 42, Column 5 lines 55 – 67, since the only output for the audible warning is the speaker said audible warning would inherently be superimposed on any other audio signal that is transmitted simultaneously). Nonogaki further teaches a music sounds producing function (Column 4 lines 7 – 15).

5. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable Ichimura (US 6,501,968) in view of Reichelt (6,427,072) as applied to claim 4 above, and further in view of Cathey et al. (US 6,201,977).

Regarding Claim 12, Ichimura in view of Reichelt teaches all of the claimed limitations recited in Claim 4. Ichimura further teaches a first determining means and

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second determining means that determines the battery capacity (Column 4 lines 27 – 50, Column 4 lines 61 – 67, Column 5 lines 1 – 4).

Ichimura in view of Reichelt does not specifically teach a first and second determining means that determine the battery capacity based on a terminal voltage of the battery.

Cathey teaches a determining means that determines the battery capacity based on a terminal voltage of the battery (Column 3 lines 3 – 8, the sensing circuit inherently detects the voltage level of the battery so that it can be compared to the predetermined voltage level).

Ichimura in view of Reichelt and Cathey both teach a determining means that determines the battery capacity of a battery such that power conservation is maintained. It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to use the voltage level determining method taught in Cathey in the battery charge detecting circuitry of Ichimura in view of Reichelt such that there is an accurate measurement of the battery charge level of the battery in Ichimura in view of Reichelt as taught by Cathey.

Regarding Claim 13, Ichimura in view of Reichelt teaches all of the claimed limitations recited in Claim 11. Ichimura further teaches a first, second, and third determining means that determines the battery capacity (Column 4 lines 27 – 50, Column 4 lines 61 – 67, Column 5 lines 1 – 4).

Ichimura in view of Reichelt does not specifically teach a first, second, and third means that determines the battery capacity based on a terminal voltage of the battery.

Cathey teaches a determining means that determines the battery capacity based on a terminal voltage of the battery (Column 3 lines 3 – 8, the sensing circuit inherently detects the voltage level of the battery so that it can be compared to the predetermined voltage level).

Ichimura in view of Reichelt and Cathey both teach a determining means that determines the battery capacity of a battery such that power conservation is maintained. It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to use the voltage level determining method taught in Cathey in the battery charge detecting unit in Ichimura in view of Reichelt such that there is an accurate measurement of the battery charge level of the battery in Ichimura in view of Reichelt as taught by Cathey.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S Dean whose telephone number is 703-305-8998. The examiner can normally be reached on 7:00-3:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



NICK CORSARO
PRIMARY EXAMINER



Raymond S. Dean
March 22, 2005